A METHOD OF TRACKING IN PRODUCTION

IN A PLANT FOR LIQUID FOODS

ATTACHMENT A

TABLE REPORT

Table Report

AccessData

Notes:

Column details		
1. ID	**Notes:**	The unique ID (automatically incremented)
2. NodeGroup_ID		
3. Area_ID		
4. User_UserGroup_ID		
5. LastSaved	**Notes:**	The time stamp for when the row was inserted
6. ConfiguredBy	**Notes:**	The user that inserted the row, e.g. system or a certain user

Alarm

Notes: The Alarm table consist the logging configuration of all alarms.

Column details		
1. ID	**Notes:**	The unique ID (automatically incremented)
2. Tagname		
3. AlarmGroup		
4. Description		
5. LastSaved	**Notes:**	The time stamp for when the row was inserted
6. ConfiguredBy	**Notes:**	The user that inserted the row, e.g. system or a certain user

AlarmLog

Notes: The AlarmLog table consist of a relation to all alarms that are logged in the Wonderware InTouch Alarm Log.

Column details		
1. ID	**Notes:**	The unique ID (automatically incremented)
2. WorkEventLog_ID		
3. IT_AlarmMaster_AlarmID	**Notes:**	Refers to the AlarmMaster database generated by Wonderware InTouch

Area

Notes:

Column details		
1. ID	**Notes:**	The unique ID (automatically incremented)
2. Name		
3. Description		
4. LastSaved	**Notes:**	The time stamp for when the row was inserted
5. ConfiguredBy	**Notes:**	The user that inserted the row, e.g. system or a certain user

AreaFunction

Notes:

Column details		
1. ID	**Notes:**	The unique ID (automatically incremented)
2. Area_ID		
3. FunctionBitKey		
4. Description		
5. LastSaved	**Notes:**	The time stamp for when the row was inserted
6. ConfiguredBy	**Notes:**	The user that inserted the row, e.g. system or a certain user

BatchLog

Notes: The BatchLog table consists of all registered batches.

Column details
1. ID   Notes: The unique ID (automatically incremented)
2. Created   Notes: Time when the batch was registered

BatchLog_WorkLog

Notes: The BatchLog_WorkLog table builds the relation between the BatchLog table and the WorkLog table. Thereby it is possible to find out which WorkID's that is connected to which batches.

Column details
1. ID   Notes: The unique ID (automatically incremented)
2. BatchLog_ID
3. WorkLog_ID

CalculationType

Notes: The CalculationType table consist of the different calculation types that are included, e.g. TimeToSetpoint.

Column details
1. ID   Notes: The unique ID (automatically incremented)
2. Description
3. LastSaved   Notes: The time stamp for when the row was inserted
4. ConfiguredBy   Notes: The user that inserted the row, e.g. system or a certain user

CIPCircuit

Notes: The CIPCircuit table contains the different CIP circuits.

Column details
1. ID   Notes: The unique ID (automatically incremented)
2. Name
3. CIPSystem
4. LastSaved   Notes: The time stamp for when the row was inserted
5. ConfiguredBy   Notes: The user that inserted the row, e.g. system or a certain user

CIPEventInfoCause

Notes: The CIPEventInfoCause table contains the description of all the CIP causes that can be reported by the system. The content is then used in the CIPEventInfoLog table.

Column details
1. ID
2. PLC_ID   Notes: The ID from the PLC
3. Description
4. LastSaved   Notes: The time stamp for when the row was inserted
5. ConfiguredBy   Notes: The user that inserted the row, e.g. system or a certain user

CIPEventInfoLog

Notes: The CIPEventInfoLog table holds current and historical information of CIP phases that have entered and left Held status during the execution of phases.

Column details

1. ID	Notes:	The unique ID (automatically incremented)
2. CIPEventLog_ID		
3. StartDateTime		
4. EndDateTime		
5. CIPEventInfoCause_Description		
6. CausedBy		
7. CauseEndedBy		
8. PhaseStatus		

CIPEventLog

Notes: The CIPEventLog table holds current and historical information of CIP phase execution.

Column details

1. ID	Notes:	The unique ID (automatically incremented)
2. UnitName		
3. StartDateTime		
4. EndDateTime		
5. CIPProgram_Description	Notes:	Describes which CIP program that was running
6. CIPResult_Description	Notes:	Describes the result of the CIP, e.g. 'cleaned' and 'not cleaned'
7. CIPCircuit		
8. PhaseStatus	Notes:	To view wheather the phase were Done or Aborted
9. PhaseInstantCounter		
10. StartedBy		
11. EndedBy		
12. OverrideBy		
13. OverrideCause		

CIPEventParameterLog

Notes: The CIPEventParameterLog table holds additional information on parameters that is supposed to be logged together with the CIP phase. The information is time based, aggregated information that is retrieved and calculated based on information from Wonderware InSQL.

Column details

1. ID	Notes:	The unique ID (automatically incremented)
2. CIPEventLog_ID		
3. PhaseParameter_Name		
4. PhaseParameter_TransmitterType		
5. PhaseParameter_EngineeringUnit	Notes:	Describes the engineering unit for the specific phase, e.g. kg or l
6. PhaseParameter_MinEU		
7. PhaseParameter_MaxEU		
8. AnalogueDiscrete		
9. Maximum	Notes:	Maximum value for certain parameter during phase operation.
10. Minimum	Notes:	Minimum value for certain parameter during phase operation.
11. Average	Notes:	Average value for certain parameter during phase operation.
12. Summary	Notes:	Summary value for certain parameter during phase operation.
13. StartValue	Notes:	Starting value of the parameter when phase went to Run
14. EndValue	Notes:	Ending value of the parameter when phase went to Done or Aborted

CIPProgram

Notes: The CIPProgram table contains descriptions of all the CIP programs that can be reported by the system.

Column details		
1. ID	Notes:	The unique ID (automatically incremented)
2. PLC_ID	Notes:	The ID from the PLC
3. Description		
4. LastSaved	Notes:	The time stamp for when the row was inserted
5. ConfiguredBy	Notes:	The user that inserted the row, e.g. system or a certain user

CIPResult

Notes: The CIPResult table contains descriptions of all the CIP result statuses that can be reported by the system.

Column details		
1. ID	Notes:	The unique ID (automatically incremented)
2. PLC_ID	Notes:	The ID from the PLC
3. Description		
4. LastSaved	Notes:	The time stamp for when the row was inserted
5. ConfiguredBy	Notes:	The user that inserted the row, e.g. system or a certain user

CIPStepGroupLog

Notes: The CIPStepGroupLog table log the different step groups, i.e. in which order they where executed and between which step numbers the step group was evaluating.

Column details		
1. ID	Notes:	The unique ID (automatically incremented)
2. CIPEventLog_ID		
3. StartStep_StepNumber		
4. EndStep_StepNumber		
5. StartDateTime		
6. EndDateTime		
7. Tagname_StepSequence		
8. CIPStepGroundOrder_Order		

CIPStepGroupOrder

Notes: The CIPStepGroupOrder table consist of the order in which the step groups occurs within certain CIP recipes.

Column details		
1. ID	Notes:	The unique ID (automatically incremented)
2. CIPProgram_ID		
3. StepGroup_ID		
4. StepGroupOrder		
5. LastSaved	Notes:	The time stamp for when the row was inserted
6. ConfiguredBy	Notes:	The user that inserted the row, e.g. system or a certain user

CIPStepGroupParameter

Notes: The CIPStepGroupParameters consist of different parameters that are supposed to be logged and their relation to different step groups.

Column details		
1. ID	Notes:	The unique ID (automatically incremented)
2. StepGroup_ID		
3. CalculationType_ID		
4. Tagname		
5. Tagname_Setpoint		
6. AllowedDeviation	Notes:	Allowed deviations, e.g. three flucturations or less is accepted
7. Deadband_Low		
8. Deadband_High		
9. StepGroupOrder		
10. Description		
11. EngineeringUnit		
12. LastSaved	Notes:	The time stamp for when the row was inserted
13. ConfiguredBy	Notes:	The user that inserted the row, e.g. system or a certain user

CIPStepParameterLog

Notes: The CIPStepParameterLog table hold the CIP step group parameters.

Column details		
1. ID	Notes:	The unique ID (automatically incremented)
2. CIPStepLog_ID		
3. CIPStepGroupParameter_Description		
4. CalculationTypeEngineeringUnit		
5. CIPStepGroupOrder		
6. ResultValue		
7. CompareValue		
8. OutOfRange	Notes:	If the result was out of range. 0 = within range 1 = out of range

CommentLog

Notes: The CommentLog table holds the comments with their relation to different WorkID´s.

Column details		
1. ID	Notes:	The unique ID (automatically incremented)
2. WorkLog_ID		
3. Comment		
4. WrittenBy	Notes:	The user that inserted the comment
5. InsertTime	Notes:	Timestamp for when the comment was inserted

ControlModule

Notes: The ControlModule table consists of the configured control modules, like valves and motors.

Column details		
1. ID	Notes:	The unique ID (automatically incremented)
2. Name		
3. Tagname		
4. Description		
5. LastSaved	Notes:	The time stamp for when the row was inserted
6. ConfiguredBy	Notes:	The user that inserted the row, e.g. system or a certain user

DataLog

Notes: To be able to verify that all requested data is logged, this table has been created. When the system is running all data that is related to a specific phase status will be stored as a text in the description field.

Column details

1. DateTime	**Notes:**	Time stamp of when the log was made
2. PhaseName	**Notes:**	The name of the logged phase
3. Description	**Notes:**	Description of what has been logged

EquipmentModuleStatusLog

Notes: ???

Column details

1. ID	**Notes:**	The unique ID (automatically incremented)
2. WorkLog_ID		
3. Reference		
4. DoneBy	**Notes:**	The user that inserted the ???
5. InsertTime		

ErrorLog

Notes: The ErrorLog table contains all errors that have been generated on the TP developed software's within the Work Tracking concept.

Column details

1. LogID	**Notes:**	The unique ID (automatically incremented)
2. ApplicationModule		
3. ProcedureName		
4. ErrorMessage		
5. ErrorTime		
6. UserName		

GraphCommentLog

Notes: The GraphCommentLog table holds comments that have been added to a graph at a certain time. The comment are in fact added to a certain tag - not the graph.

Column details

1. ID	**Notes:**	The unique ID (automatically incremented)
2. Comment		
3. MarkTime	**Notes:**	The time where the comment is supposed to be located
4. WrittenBy	**Notes:**	The user that inserted the comment
5. InsertTime	**Notes:**	Timestamp for when the comment was inserted
6. Tagname	**Notes:**	The tag to which the comment are related Refers to the UnitParameter table

GraphGroup

Notes: The GraphGroup table consist of the configured Graph groups.

Column details

1. ID	**Notes:**	The unique ID (automatically incremented)
2. Name		
3. Description		
4. LastSaved	**Notes:**	The time stamp for when the row was inserted
5. ConfiguredBy	**Notes:**	The user that inserted the row, e.g. system or a certain user

GraphGroupParameter

Notes: The GraphGroupParameter table consist of the parameters that are used in certain GraphGroups.

Column details		
1. ID	Notes:	The unique ID (automatically incremented)
2. GraphGroup_ID		
3. Name		
4. Tagname		
5. TransmitterType	Notes:	Describes the type of the transmitter, e.g.: - TT - Temperature - FT - Flow - PT - Pressure - LT - Level
6. TransmitterType_EU	Notes:	The engineering type for the actual transmitter, e.g. °C or kg
7. MinEU	Notes:	Lowest possible value for the certain transmitter
8. MaxEU	Notes:	Highest possible value for the certain transmitter
9. StepSequence	Notes:	This parameter describes weather the parameter is of a step sequence type, meaning that the parameter is supposed to be drawn as a 'stair'. 0 = Not a step sequence 1 = Step sequence
10. LastSaved	Notes:	The time stamp for when the row was inserted
11. ConfiguredBy	Notes:	The user that inserted the row, e.g. system or a certain user

LIMSMessageReceived

Notes:

Column details
1. MessageNumber
2. DateTimeStamp
3. MessageType
4. X1
5. X2
6. X3
7. X4
8. X5
9. X6
10. X7
11. X8
12. X9
13. X10

MaintenanceData

Notes: The MaintenanceData table consist of maintenance information regarding the control modules.

Column details		
1. ID	Notes:	The unique ID (automatically incremented)
2. ControlModule_ID		
3. Activations		
4. OperatingTime		
5. LastService		
6. LastSaved	Notes:	The time stamp for when the row was inserted
7. ConfiguredBy	Notes:	The user that inserted the row, e.g. system or a certain user

Material

Notes: The Material table contains information on all the materials that are used within a plant, including raw material, intermediates and finished goods.

Column details		
1. ID	Notes:	The unique ID (automatically incremented)
2. PLC_ID	Notes:	The ID from the PLC
3. SiteMaterialID	Notes:	This parameter is used if the customer has their own Material_ID standard
4. Name		
5. MaterialClass_ID		
6. MaterialType_ID		
7. Density		
8. LastSaved	Notes:	The time stamp for when the row was inserted
9. ConfiguredBy	Notes:	The user that inserted the row, e.g. system or a certain user

MaterialClass

Notes: The MaterialClass table holds information regarding the different classes of materials, e.g. milk, cream and mixed products.

Column details		
1. ID	Notes:	The unique ID (automatically incremented)
2. Name		
3. Description		
4. LastSaved	Notes:	The time stamp for when the row was inserted
5. ConfiguredBy	Notes:	The user that inserted the row, e.g. system or a certain user

MaterialClassRules

Notes: The MaterialClassRules table consist of the rules between material classes according to process groups and their unit status.

Column details		
1. ID	Notes:	The unique ID (automatically incremented)
2. ExistingMaterialClass_ID		
3. NewMaterialClass_ID		
4. ProcessGroup_ID		
5. UnitStatus_ID		
6. LastSaved	Notes:	The time stamp for when the row was inserted
7. ConfiguredBy	Notes:	The user that inserted the row, e.g. system or a certain user

MaterialRules

Notes: The MaterialRules table consist of the rules between materials according to process groups and their unit status.

Column details		
1. ID	Notes:	The unique ID (automatically incremented)
2. ExistingMaterial_ID		
3. NewMaterial_ID		
4. ProcessGroup_ID		
5. UnitStatus_ID		
6. LastSaved	Notes:	The time stamp for when the row was inserted
7. ConfiguredBy	Notes:	The user that inserted the row, e.g. system or a certain user

MaterialType

Notes: The MaterialType table holds information regarding the different types of material, e.g. raw material, intermediate and finished product.

Column details		
1. ID	**Notes:**	The unique ID (automatically incremented)
2. Name		
3. Description		
4. LastSaved	**Notes:**	The time stamp for when the row was inserted
5. ConfiguredBy	**Notes:**	The user that inserted the row, e.g. system or a certain user

Node

Notes:

Column details		
1. ID	**Notes:**	The unique ID (automatically incremented)
2. NodeGroup_ID		
3. Name		
4. Description		
5. LastSaved	**Notes:**	The time stamp for when the row was inserted
6. ConfiguredBy	**Notes:**	The user that inserted the row, e.g. system or a certain user

NodeGroup

Notes:

Column details		
1. ID	**Notes:**	The unique ID (automatically incremented)
2. Name		
3. LastSaved	**Notes:**	The time stamp for when the row was inserted
4. ConfiguredBy	**Notes:**	The user that inserted the row, e.g. system or a certain user

OverrideInfoCause

Notes: The OverrideInfoCause table contains the description of all the causes that can be reported by the system. The content is then used in the OverrideLog table.

Column details		
1. ID	**Notes:**	The unique ID (automatically incremented)
2. Description		
3. LastSaved	**Notes:**	The time stamp for when the row was inserted
4. ConfiguredBy	**Notes:**	The user that inserted the row, e.g. system or a certain user

OverrideLog

Notes: The OverrideLog table holds current and historical information of overrides of phases.

Column details		
1. ID	**Notes:**	The unique ID (automatically incremented)
2. WorkEventLog_ID		
3. OverrideInfoCause_Description		
4. DoneBy	**Notes:**	The user that overrride the function
5. Comment		
6. Phase_Name		
7. PhaseInstanceCounter		

ParameterChangeLog

Notes: The ParameterChangeLog table is used to be able to log parameter changes in the UI.

Column details

1. ID	**Notes:**	The unique ID (automatically incremented)
2. Unit_Name		
3. ParameterName		
4. NewValue		
5. OldValue		
6. DateTimeStamp		
7. DoneBy	**Notes:**	The user that updated the parameter

Phase

Notes: The Phase table contains information about the individual phase. The phase can have attributes such as phase type or destination and source unit in case a transportation of material is considered.

Column details

1. ID	**Notes:**	The unique ID (automatically incremented)
2. Name		
3. PhaseType_ID	**Notes:**	The type of phase, e.g.: - 'Prod' for production - 'Transfer' for a trnasfer - 'CIP' for a CIP
4. SourceUnit_ID	**Notes:**	Source UnitID - used for all type of phases
5. DestinationUnit_ID	**Notes:**	Destination UnitID - used only for transfer phases
6. AmountEngineeringUnit	**Notes:**	Describes the engineering unit for the specific phase, e.g. kg or l
7. Description		
8. ReturnToUnit	**Notes:**	For tanks that are "never" emptied, e.g. recovery tanks and oil tanks. Used to avoid long traceability trees. The search criteria will only go back one step at a time
9. LastSaved	**Notes:**	The time stamp for when the row was inserted
10. ConfiguredBy	**Notes:**	The user that inserted the row, e.g. system or a certain user

Phase_Alarm

Notes: Relation table for Alarm and Phase.

Column details

1. ID	**Notes:**	The unique ID (automatically incremented)
2. Phase_ID		
3. Alarm_ID		
4. LastSaved	**Notes:**	The time stamp for when the row was inserted
5. ConfiguredBy	**Notes:**	The user that inserted the row, e.g. system or a certain user

PhaseParameter

Notes: The PhaseParameter table holds configuration information of parameters that are to be logged together with individual phases. The tagname supplied must match a tagname of an analog tag in the InSQL database. All calculations are based on InSQL and the resolution is used to set the number of rows retrieved for calculations.
The bits are 1 or 0 depending on if the type of calculation that should be performed.

Column details		
1. ID	Notes:	The unique ID (automatically incremented)
2. Phase_ID		
3. Name		
4. Tagname	Notes:	All parameters are supposed to be included here. Those parameters that are unit related, like level and temperature, are supposed to be linked with the production phase
5. TransmitterType		
6. TransmitterType_EU	Notes:	Describes the engineering unit for the specific parameter, e.g. °C, kg or mS
7. MinEU	Notes:	Used to define the graph's y-axis
8. MaxEU	Notes:	Used to define the graph's y-axis
9. AnalogueDiscrete	Notes:	This parameter is used to describe weather the parameter is analogue or discrete: 0 = Analogue 1 = Discrete
10. Resolution		
11. LogMaximum	Notes:	This parameter is used to describe weather a maximum value for the parameter is supposed to be calculated and logged: 0 = No 1 = Yes
12. LogMinimum	Notes:	This parameter is used to describe weather a minimum value for the parameter is supposed to be calculated and logged: 0 = No 1 = Yes
13. LogAverage	Notes:	This parameter is used to describe weather an average value for the parameter is supposed to be calculated and logged: 0 = No 1 = Yes
14. LogSummary	Notes:	This parameter is used to describe weather a summary value for the parameter is supposed to be calculated and logged: 0 = No 1 = Yes
15. LogStartValue	Notes:	This parameter is used to describe weather a start value for the parameter is supposed to be logged: 0 = No 1 = Yes
16. LogEndValue	Notes:	This parameter is used to describe weather a end value for the parameter is supposed to be logged: 0 = No 1 = Yes
17. LastSaved	Notes:	The time stamp for when the row was inserted
18. ConfiguredBy	Notes:	The user that inserted the row, e.g. system or a certain user

PhaseType

Notes: The PhaseType table holds configuration information on the different phase types available.

Column details		
1. ID	Notes:	The unique ID (automatically incremented)
2. Description		
3. LastSaved	Notes:	The time stamp for when the row was inserted
4. ConfiguredBy	Notes:	The user that inserted the row, e.g. system or a certain user

ProcessClass

Notes: The ProcessClass table holds information regarding the different process classes, e.g. Pasteurisers and CIPCircuits.

Column details		
1. ID	Notes:	The unique ID (automatically incremented)
2. Name		
3. Description		
4. LastSaved	Notes:	The time stamp for when the row was inserted
5. ConfiguredBy	Notes:	The user that inserted the row, e.g. system or a certain user

ProcessGroup

Notes: The ProcessGroup table holds information regarding the different process groups, e.g. MilkPasteuriser and RawMilkTanks.

Column details		
1. ID	Notes:	The unique ID (automatically incremented)
2. Name		
3. Description		
4. LastSaved	Notes:	The time stamp for when the row was inserted
5. ConfiguredBy	Notes:	The user that inserted the row, e.g. system or a certain user

ProcessGroup_UnitStatus

Notes: Relation table for ProcessGroup and UnitStatus.

Column details		
1. ID	Notes:	The unique ID (automatically incremented)
2. ProcessGroup_ID		
3. UnitStatus_ID		
4. LastSaved	Notes:	The time stamp for when the row was inserted
5. ConfiguredBy	Notes:	The user that inserted the row, e.g. system or a certain user

QALog

Notes: The QALog table includes header information regarding a quality acceptance.

Column details		
1. ID	Notes:	The unique ID (automatically incremented)
2. WorkEventLog_ID		
3. SampleTime		
4. QAResult		
5. Material_Name		

QAParameter

Notes:

Column details		
1. ID	Notes:	The unique ID (automatically incremented)
2. Name		
3. EngineeringUnit		
4. LastSaved	Notes:	The time stamp for when the row was inserted
5. ConfiguredBy	Notes:	The user that inserted the row, e.g. system or a certain user

QAParameterLog

Notes:		The QAParameterLog table holds information regarding different QA parameters and their relation to different QA headers in the QALog table.

Column details

1. ID	**Notes:**	The unique ID (automatically incremented)
2. QALog_ID		
3. QAParameter_Name		
4. QAParameter_EngineeringUnit	**Notes:**	Describes the engineering unit for the specific parameter, e.g. °C, kg or mS
5. QAParameter_Value		

QAStatus

Notes:

Column details

1. ID	**Notes:**	The unique ID (automatically incremented)
2. Description		
3. LastSaved	**Notes:**	The time stamp for when the row was inserted
4. ConfiguredBy	**Notes:**	The user that inserted the row, e.g. system or a certain user

QualityTestParameter

Notes:		The QualityTestParameter table contain different test parameters that are needed, e.g. temperature, pH and taste.

Column details

1. ID	**Notes:**	The unique ID (automatically incremented)
2. QualityTestType_ID		
3. Name		
4. EngineeringUnit	**Notes:**	Describes the engineering unit for the specific parameter, e.g. °C, kg or mS
5. MinEU		
6. MaxEU		
7. GoodBad	**Notes:**	The GoodBad parameter indicates weather a result for Good/Bad is expected
8. GoodBad_Value	**Notes:**	The GoodBad_Value parameter indicates weather the test parameter value was good or bad. 1 = Good 0 = Bad
9. YesNo	**Notes:**	The YesNo parameter indicates weather a result for Yes/No is expected
10. YesNo_Value	**Notes:**	The YesNo_Value parameter indicates weather the test parameter value was yes or no. 1 = Yes 0 = No
11. ApprovedOrNot	**Notes:**	The ApprovedOrNot parameter indicates weather a result for Approved/NotApproved is expected
12. ApprovedOrNot_Value	**Notes:**	The ApprovedOrNot_Value parameter indicates weather the test parameter value was approved or not approved. 1 = Approved 0 = Not approved
13. LastSaved	**Notes:**	The time stamp for when the row was inserted
14. ConfiguredBy	**Notes:**	The user that inserted the row, e.g. system or a certain user

QualityTestType

Notes: The QualityTestType table contains different types of test to take depending e.g. of the material and the process cell/class.

Column details

1. ID	Notes:	The unique ID (automatically incremented)
2. Name		
3. Description		
4. LastSaved	Notes:	The time stamp for when the row was inserted
5. ConfiguredBy	Notes:	The user that inserted the row, e.g. system or a certain user

ReportQuery

Notes: The ReportQuery table contain information of the different configured reports.

Column details

1. ID	Notes:	The unique ID (automatically incremented)
2. Name	Notes:	The report name
3. SQLQuery	Notes:	The SQL query for the report. May not include Delete ot Update!!!
4. LastSaved	Notes:	The time stamp for when the row was inserted
5. ConfiguredBy	Notes:	The user that inserted the row, e.g. system or a certain user

SectionLog

Notes: The SectionLog table works as a relation table between the ShipmentLog table and the WorkLog table, but do also include possibility to divide one shipment into two barrels.

Column details

1. ID	Notes:	The unique ID (automatically incremented)
2. WorkLog_ID		
3. ShipmentLog_ID		
4. Barrel1		
5. Barrel2		

ShipmentLog

Notes: The ShipmentLog table holds current and historical information of shipments.

Column details

1. ID	Notes:	The unique ID (automatically incremented)
2. ERP_ID		
3. ShipmentStatus_Name		
4. SupplierName		
5. TruckRegistratioNumber		
6. TrailerRegistrationNumber		
7. MaterialName		
8. ExpectedDateTime		
9. ExpectedAmount		
10. EngineerinUnit		
11. Weighing1_Time		
12. Weighing1_ActualAmount		
13. Weighing1_StartedBy		
14. Weighing2_Time		
15. Weighing2_ActualAmount		
16. Weighing2_StartedBy		
17. ShipmentCIPWorkID		

ShipmentStatus

Notes: The ShipmentStatus table contains the description of all different status that a shipment can be in. The content is then used in the ShipmentLog table.

Column details
1. ID   Notes: The unique ID (automatically incremented)
2. Description
3. LastSaved   Notes: The time stamp for when the row was inserted
4. ConfiguredBy   Notes: The user that inserted the row, e.g. system or a certain user

Step

Notes: The Step table contains informaiton regarding the different steps but also a reference to the ProcessClass table.

Column details
1. ID   Notes: The unique ID (automatically incremented)
2. ProcessClass_ID
3. StepNumber
4. Description
5. LastSaved   Notes: The time stamp for when the row was inserted
6. ConfiguredBy   Notes: The user that inserted the row, e.g. system or a certain user

StepGroup

Notes: The StepGroup table contains information of the different step groups.

Column details
1. ID   Notes: The unique ID (automatically incremented)
2. Name
3. Description
4. StartStep_StepNumber
5. EndStep_StepNumber
6. LastSaved   Notes: The time stamp for when the row was inserted
7. ConfiguredBy   Notes: The user that inserted the row, e.g. system or a certain user

TetraMessageReceivedBuffer

Notes:

Column details
1. MessageNumber
2. DateTimeStamp
3. MessageType
4. X1
5. X2
6. X3
7. X4
8. X5
9. X6
10. X7
11. X8
12. X9
13. X10

TransferLog

| Notes: | | The TransferLog table contains information on transportation of material between different units. All such logging occurs at phase completion, i.e. Done or Aborted. |

Column details		
1. ID	Notes:	The unique ID (automatically incremented)
2. WorkEventLog_ID		
3. LotID	Notes:	Lot information of the delivering supplier in case not in-house
4. Material_Name		
5. Material_Density		
6. MaterialClass_Name		
7. MaterialType_Name		
8. Phase_AmountEngineeringUnit	Notes:	Describes the engineering unit for the specific phase, e.g. kg or l
9. SourseEquipmentModuleStatus_Name	Notes:	E.g. a tankline or a line out from a uht
		Used for traceability
10. DestinationEquipmentModuleStatus_Name	Notes:	E.g. a line to a uht or a tankline
		Used for traceability
11. TargetAmount		
12. RecipeTargetAmount		
13. ActualAmount		
14. ReturnToUnit	Notes:	For tanks that are "never" emptied, e.g. recovery tanks and oil tanks. Used to avoid long traceability trees. The search criteria will only go back one step at a time

Unit

| Notes: | | The Unit table contains information on all the unit/equipment in the plant that is relevant for logging purposes and for relating different phases to different unit/equipment. |

Column details		
1. ID	Notes:	The unique ID (automatically incremented)
2. Name		
3. UnitType_ID	Notes:	The type of unit/equipment described with one or two letters, e.g.: - T = Tank - TL = Tank line - P = Pasteuriser
4. ProcessClass_ID		
5. ProcessGroup_ID		
6. StepSequenceTagname		
7. EquipmentModule	Notes:	Because units and equipments are similar from many point of views they are located within the same table. The value of the parameter decides weather it is a unit or an equipment module: 0 = Unit 1 = Equipment module
8. WorkID		
9. Capacity		
10. Capacity_EU	Notes:	Describes the engineering unit for the specific unit, e.g. l or l/h
11. Material_ID		
12. AmountTagname		
13. QAStatus_ID		
14. Active_WorkID		
15. PictureName	Notes:	The name of the picture that will be visible in the traceability tree
16. LastSaved	Notes:	The time stamp for when the row was inserted
17. ConfiguredBy	Notes:	The user that inserted the row, e.g. system or a certain user

Unit_CIPCircuit

| Notes: | | Relation table for Unit and CIPCircuit. |

Column details		
1. ID	Notes:	The unique ID (automatically incremented)
2. Unit_ID		
3. CIPCircuit_ID		
4. LastSaved	Notes:	The time stamp for when the row was inserted
5. ConfiguredBy	Notes:	The user that inserted the row, e.g. system or a certain user

Unit_ControlModule

Notes: Relation table for Unit and ControlModule

Column details		
1. ID	Notes:	The unique ID (automatically incremented)
2. Unit_ID		
3. ControlModule_ID		
4. LastSaved	Notes:	The time stamp for when the row was inserted
5. ConfiguredBy	Notes:	The user that inserted the row, e.g. system or a certain user

UnitCapacity

Notes: This is a relation table within the capacity can be configured according to one or all of:
- Which unit it is
- The certain unit mode
- Which material it is

Column details		
1. ID	Notes:	The unique ID (automatically incremented)
2. Unit_ID		
3. Mode_ID		
4. MaterialClass_ID		
5. Capacity		
6. Capacity_EU	Notes:	Describes the engineering unit for the specific unit, e.g. l or l/h
7. LastSaved	Notes:	The time stamp for when the row was inserted
8. ConfiguredBy	Notes:	The user that inserted the row, e.g. system or a certain user

UnitMode

Notes: The UnitMode table contains information of different modes for some units (e.g. pasteurisers).

Column details		
1. ID	Notes:	The unique ID (automatically incremented)
2. Unit_ID		
3. Mode		
4. Name		
5. Description		
6. LastSaved	Notes:	The time stamp for when the row was inserted
7. ConfiguredBy	Notes:	The user that inserted the row, e.g. system or a certain user

UnitStatus

Notes: The UnitStatus table contains descriptions of all the unit statuses that can be reported by the system.

Column details		
1. ID	Notes:	The unique ID (automatically incremented)
2. PLC_ID	Notes:	The ID from the PLC
3. Description		
4. StatusRank		
5. LastSaved	Notes:	The time stamp for when the row was inserted
6. ConfiguredBy	Notes:	The user that inserted the row, e.g. system or a certain user

User_UserGroup

Notes:

Column details

1. ID	Notes:	The unique ID (automatically incremented)
2. User_ID		
3. UserGroup_ID		
4. LastSaved	Notes:	The time stamp for when the row was inserted
5. ConfiguredBy	Notes:	The user that inserted the row, e.g. system or a certain user

UserGroup

Notes:

Column details

1. ID	Notes:	The unique ID (automatically incremented)
2. Name		
3. LastSaved	Notes:	The time stamp for when the row was inserted
4. ConfiguredBy	Notes:	The user that inserted the row, e.g. system or a certain user

Users

Notes:

Column details

1. ID	Notes:	The unique ID (automatically incremented)
2. Name		
3. Active		
4. Password		
5. LastSaved	Notes:	The time stamp for when the row was inserted
6. ConfiguredBy	Notes:	The user that inserted the row, e.g. system or a certain user

WorkEventInfoCause

Notes: The WorkEventInfoCause table contains the description of all the causes that can be reported by the system. The content is then used in the WorkEventInfoLog table.

Column details

1. ID	Notes:	The unique ID (automatically incremented)
2. PLC_ID	Notes:	The ID from the PLC
3. Description		
4. LastSaved	Notes:	The time stamp for when the row was inserted
5. ConfiguredBy	Notes:	The user that inserted the row, e.g. system or a certain user

WorkEventInfoLog

Notes: The WorkEventInfoLog table holds current and historical information of phases that have entered and left Held status during the execution of phases.

Column details

1. ID	Notes:	The unique ID (automatically incremented)
2. WorkEventLog_ID		
3. StartDateTime	Notes:	DateTime when the phase went to Held status
4. EndDateTime	Notes:	DateTime when the phase left Held status
5. WorkEventInfoCause_Description	Notes:	Description of the probable cause of Held
6. CausedBy	Notes:	User that was responsible for the Held, e.g. System or Operator Name
7. CauseEndedBy	Notes:	User that was responsible for taking the system from Held to Run, e.g. System or Operator Name
8. PhaseStatus	Notes:	To view wheather the phase were Done or Aborted

WorkEventLog

Notes: The WorkEventLog table holds current and historical information of phase execution.

Column details		
1. ID	Notes:	The unique ID (automatically incremented)
2. WorkLog_ID		
3. DestinationWorkID		
4. StartDateTime	Notes:	DateTime when phase went to Run status
5. EndDateTime	Notes:	DateTime when phase was Done or Aborted
6. Phase_Name		
7. PhaseType_Description		
8. PhaseStatus	Notes:	To view wheather the phase were Done or Aborted
9. PhaseInstanceCounter		
10. StartedBy	Notes:	Started by which user, e.g. System or Operator Name
11. EndedBy	Notes:	Ended by which user, e.g. System or Operator Name
12. OverrideBy		
13. OverrideCause		

WorkEventParameterLog

Notes: The WorkEventParameterLog table holds additional information on parameters that is supposed to be logged together with the phase. The information is time based, aggregated information that is retrieved and calculated based on information from Wonderware InSQL.

Column details		
1. ID	Notes:	The unique ID (automatically incremented)
2. WorkEventLog_ID		
3. PhaseParameter_Name		
4. PhaseParameter_TransmitterType		
5. PhaseParameter_EngineeringUnit	Notes:	Describes the engineering unit for the specific parameter, e.g. °C, kg or mS
6. PhaseParameter_MinEU	Notes:	Used to define the graph's y-axis
7. PhaseParameter_MaxEU	Notes:	Used to define the graph's y-axis
8. AnalogueDiscrete	Notes:	This parameter is used to describe weather the parameter is analogue or discrete: 0 = Analogue 1 = Discrete
9. Maximum	Notes:	Maximum value for certain parameter during phase operation.
10. Minimum	Notes:	Minimum value for certain parameter during phase operation.
11. Average	Notes:	Average value for certain parameter during phase operation.
12. Summary	Notes:	Summary value for certain parameter during phase operation.
13. StartValue	Notes:	Starting value of the parameter when phase went to Run
14. EndValue	Notes:	Ending value of the parameter when phase went to Done or Aborted

WorkIDLog

Notes:

Column details		
1. ID	Notes:	The unique ID (automatically incremented)
2. Unit_ID		
3. Unit_Name		
4. ActiveWorkID		

WorkLog

Notes: The WorkLog table consists of information that is general to the WorkID.

Column details

#	Column		Notes
1.	ID	Notes:	The unique ID (automatically incremented)
2.	Alias		
3.	Unit_Name		
4.	UnitMode_Name		
5.	StartDateTime		
6.	EndDateTime		
7.	Material_Name		
8.	Material_Density		
9.	Material_EngineringUnit	Notes:	Describes the engineering unit for the specific material, e.g. l or kg
10.	Material_TargetAmount		
11.	Material_ActualAmount		
12.	MaterialClass_Name		
13.	MaterialType_Name		
14.	InternalTransfer		
15.	StartedBy		
16.	EndedBy		
17.	UnitCapacity_Capacity		
18.	UnitCapacity_CapacityEngineeringUnit	Notes:	Describes the engineering unit for the specific unit, e.g. l or l/h
19.	PhaseType_Description		
20.	PreviousWorkID	Notes:	Previous WorkID for the actual unit - will help for traceability generation. Can also contain CIP WorkID
21.	WorkType_Description_Previous	Notes:	Either CIP or Production to be able to differ them from each other
22.	TimeSinceLastOperation		
23.	TimeSinceLastCIP		
24.	NextWorkID	Notes:	Next WorkID for the actual unit - will help for traceability generation. Can also contain CIP WorkID
25.	WorkType_Description_Next		
26.	CommentOccured	Notes:	Will be set to one if any comment related to the phase has been written
27.	AlarmOccured	Notes:	Will be set to one if any alarm related to the phase has occured
28.	LatestQAResult		
29.	PictureName	Notes:	The name of the picture that will be visible in the traceability tree
30.	CIPEventLog_ID	Notes:	Needs to find out CIP's for actual unit
31.	StartUnitStatus_Description	Notes:	The initial status for the actual unit when the operation is started - can be used for reports

z_cfg

Notes:

Column details

#	Column		Notes
1.	Variable		
2.	ActionValue		
3.	Comment		
4.	LastSaved	Notes:	The time stamp for when the row was inserted
5.	ConfiguredBy	Notes:	The user that inserted the row, e.g. system or a certain user